

Application No. 10/764,805

Reply to Office Action dated April 10, 2008

and in response to the Notice of Appeal filed on June 30, 2008

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) An optical recording medium comprising:  
a substrate;  
a reflective layer;  
a light transmission layer; and  
at least one recording layer positioned between the reflective layer and the light transmission layer, the recording layer being of the type in which data can be recorded by projecting a laser beam-~~thereon~~to, the recording layer including a first recording film containing an element selected from the group consisting of Si, Ge, Sn, Mg, In, Zn, Bi and Al as a primary component and a second recording film containing Cu as a primary component and 10 to 30 atomic % of Al as an additive,

wherein the element contained in the first recording film as a primary component and the element contained in the second recording film as a primary component are mixed upon irradiation with the laser beam, and

wherein the light transmission layer is disposed on the opposite side to the substrate with respect to the recording layer and one surface of the light transmission layer constitutes a light incidence plane through which the laser beam enters the optical recording medium.

2. (Original) An optical recording medium in accordance with Claim 1, wherein the second recording film is formed so as to be in contact with the first recording film.

3. (Original) An optical recording medium in accordance with Claim 1, wherein the second recording film contains 10 to 25 atomic % of Al.

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4. (Original) An optical recording medium in accordance with Claim 3, wherein the second recording film contains 20 to 25 atomic % of Al.

5. (Original) An optical recording medium in accordance with Claim 1, which further comprises a first dielectric layer and a second dielectric layer on the both sides of the recording layer.

6. (Original) An optical recording medium in accordance with Claim 2, which further comprises a first dielectric layer and a second dielectric layer on the both sides of the recording layer.

7. (Original) An optical recording medium in accordance with Claim 3, which further comprises a first dielectric layer and a second dielectric layer on the both sides of the recording layer.

8. (Original) An optical recording medium in accordance with Claim 4, which further comprises a first dielectric layer and a second dielectric layer on the both sides of the recording layer.

9. (Currently Amended) An optical recording medium in accordance with Claim 1, ~~which further comprises a light transmission layer having a thickness of 10 to 300  $\mu$ m on the opposite side to the substrate with respect to the recording layer and one surface of the light transmission layer constitutes a light incidence plane through which the laser beam enters the optical recording medium wherein the light transmission layer has a thickness of 10 to 300  $\mu$ m.~~

10. (Original) An optical recording medium in accordance with Claim 1, wherein the laser beam has a wavelength of 380 nm to 450 nm.

11. (Currently Amended) An optical recording medium comprising:  
a substrate;  
a reflective layer;  
a light transmission layer;  
a plurality of information record layers positioned between the reflective layer and the light transmission layer, the recording being of the type in which data can be recorded by projecting a laser beam thereonto via the light transmission layer, at least one information recording layer other than a-an information recording layer farthest from a light incidence plane through which a laser beam enters including a first recording film containing an element selected from the group consisting of Si, Ge, Sn, Mg, In, Zn, Bi and Al as a primary component and a second recording film containing Cu as a primary component and 10 to 30 atomic % of Al as an additive,

wherein the element contained in the first recording film as a primary component and the element contained in the second recording film as a primary component are mixed upon irradiation with the laser beam; and

wherein the light transmission layer is disposed on the opposite side to the substrate with respect to the recording layer and one surface of the light transmission layer constitutes a light incidence plane through which the laser beam enters the optical recording medium.

12. (Original) An optical recording medium in accordance with Claim 11, wherein the second recording film is formed so as to be in contact with the first recording film.

13. (Original) An optical recording medium in accordance with Claim 11, wherein the second recording film contains 10 to 25 atomic % of Al.

14. (Original) An optical recording medium in accordance with Claim 13, wherein the second recording film contains 20 to 25 atomic % of Al.

15. (Currently Amended) An optical recording medium in accordance with Claim 11, ~~which further comprises a light transmission layer having a thickness of 10 to 300  $\mu\text{m}$  on the opposite side to the substrate with respect to the recording layer and one surface of the light transmission layer constitutes a light incidence plane through which the laser beam enters the optical recording medium wherein the light transmission layer has a thickness of 10 to 300  $\mu\text{m}$ .~~

16. (Currently Amended) An optical recording medium in accordance with Claim 12, ~~which further comprises a light transmission layer having a thickness of 10 to 300  $\mu\text{m}$  on the opposite side to the substrate with respect to the recording layer and one surface of the light transmission layer constitutes a light incidence plane through which the laser beam enters the optical recording medium wherein the light transmission layer has a thickness of 10 to 300  $\mu\text{m}$ .~~

17. (Currently Amended) An optical recording medium in accordance with Claim 13, ~~which further comprises a light transmission layer having a thickness of 10 to 300  $\mu\text{m}$  on the opposite side to the substrate with respect to the recording layer and one surface of the light transmission layer constitutes a light incidence plane through which the laser beam enters the optical recording medium wherein the light transmission layer has a thickness of 10 to 300  $\mu\text{m}$ .~~

18. (Currently Amended) An optical recording medium in accordance with Claim 14, ~~which further comprises a light transmission layer having a thickness of 10 to 300  $\mu\text{m}$  on the opposite side to the substrate with respect to the recording layer and one surface of the light transmission layer constitutes a light incidence plane through which the laser beam enters the optical recording medium wherein the light transmission layer has a thickness of 10 to 300  $\mu\text{m}$ .~~

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19. (Original) An optical recording medium in accordance with Claim 11, wherein the laser beam has a wavelength of 380 nm to 450 nm.

20. (Currently Amended) An optical recording medium in accordance with Claim 1, wherein the difference in the light transmittance transmittances of a mixed region of the first recording film and the second recording film and a region where the first recording film and the second recording film do not mix with each other is equal to or less than 3% for a laser beam having a wavelength of 380 nm to 450 nm.

21. (Currently Amended) An optical recording medium in accordance with Claim + 20, wherein the difference in the light transmittance transmittances of a mixed region of the first recording film and the second recording film and a region where the first recording film and the second recording film do not mix with each other is equal to or less than 1% for a laser beam having a wavelength of approximately 405-380 nm to 450 nm.

22. (Currently Amended) An optical recording medium in accordance with Claim 11, wherein the difference in the light transmittance transmittances of a mixed region of the first recording film and the second recording film and a region where the first recording film and the second recording film do not mix with each other is equal to or less than 3% for a laser beam having a wavelength of 380 nm to 450 nm.

23. (Currently Amended) An optical recording medium in accordance with Claim + 22, wherein the difference in the light transmittance transmittances of a mixed region of the first recording film and the second recording film and a region where the first recording film and the second recording film do not mix with each other is equal to or less than 1% for a laser beam having a wavelength of approximately 405-380 nm to 450 nm.

24. (Currently Amended) An optical recording medium comprising:  
a substrate;

a reflective layer;

a light transmission layer; and

at least one recording layer positioned between the reflective layer and the light transmission layer, the recording being of the type in which data can be recorded by projecting a laser beam thereonto via the light transmission layer, the recording layer including a first recording film containing an element selected from the group consisting of Si, Ge, Sn, Mg, In, Zn, Bi and Al as a primary component and a second recording film containing Cu as a primary component and 10 to 30 atomic % of Al as an additive,

wherein the difference in the light transmittance transmittances of a mixed region of the first recording film and the second recording film and a region where the first recording film and the second recording film do not mix with each other is equal to or less than 3% for a laser beam having a wavelength of 380 nm to 450 nm; and

wherein the light transmission layer is disposed on the opposite side to the substrate with respect to the recording layer and one surface of the light transmission layer constitutes a light incidence plane through which the laser beam enters the optical recording medium.

25. (Currently Amended) An optical recording medium in accordance with Claim 24, wherein the difference in the light transmittance transmittances of a mixed region of the first recording film and the second recording film and a region where the first recording film and the second recording film do not mix with each other is equal to or less than 1% for a laser beam having a wavelength of approximately 405-380 nm to 450 nm.